

DaimlerChrysler AG

Patent Claims

5 1. A gas conduit section (1), in particular an
exhaust manifold for an internal combustion engine,
characterized in that the conduit section (1) has a
porous inlay (2) which at least partially bears against
its inner wall and forms a hollow body through which
10 gas can flow freely.

2. The conduit section (1) as claimed in claim 1,
characterized in that the inlay (2) is formed from a
sintered shaped body that is able to withstand high
15 temperatures.

3. The conduit section (1) as claimed in claim 2,
characterized in that the sintered shaped body is
formed predominantly from sintered material particles
20 in fiber form.

4. The conduit section (1) as claimed in claim 2,
characterized in that the sintered shaped body is
formed predominantly from sintered material particles
25 which are approximately spherical in form.

5. The conduit section (1) as claimed in claim 4,
characterized in that the sintered shaped body is
formed predominantly from sintered material particles
30 in the form of hollow spheres.

6. The conduit section (1) as claimed in claim 4 or
5, characterized in that the sintered material
particles have an external diameter in the range from
35 0.1 mm to 10 mm, in particular in the range from 0.5 mm
to 2 mm.

7. The conduit section (1) as claimed in claim 5 or

6, characterized in that the sintered material particles have a wall thickness which is in the range from 1% to 20%, in particular in the range from 2% to 5%, of the external diameter.

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8. The conduit section (1) as claimed in one of the preceding claims, characterized in that the sintered material is predominantly metallic.

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9. The conduit section (1) as claimed in one of claims 1 to 9, characterized in that the sintered material has a porosity in the range from 1% to 30%, in particular in the range from 2% to 5%.

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10. The conduit section (1) as claimed in one of the preceding claims, characterized in that the sintered shaped body has a catalytically active coating.

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11. An internal combustion engine having an exhaust system in which an exhaust-gas catalytic converter is arranged, characterized in that the exhaust system, upstream of the exhaust-gas catalytic converter, comprises a conduit section as claimed in one of claims 1 to 11, in particular a conduit section having a porous sintered shaped body which at least partially bears against the inner wall of the conduit section and through which gas can flow freely.

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